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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Redmond et al.

Application No.: 09/090,067

Filed: June 3, 1998

For: IDENTIFICATION DOCUMENT WITH  
DOCUMENT SPECIFIC REDUCED  
SCALE PRINTING

Examiner: M. Henderson

Date: May 3, 2004

Art Unit 3722

Confirmation No.: 3497

**CERTIFICATE OF MAILING**

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Marianne McLaughlin Downing

**AMENDMENT ACCOMPANYING APPEAL BRIEF**

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Sir:

Prior to consideration of the Appeal Brief submitted herewith, please amend the subject application as follows:

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In the Claims:

1. (Currently amended) An identification document comprising:  
first printed matter rendered at a first location on said document and at a first scale enabling said first printed matter to be resolved by a viewing person without magnification, said first printed matter conveying identifying information;  
second printed matter comprising information that communicates the same identifying information as said first printed matter, the second printed matter rendered at a second microscale and at a second confidential location on said document and in a second color, said second microscale being significantly smaller than said first scale, said second confidential location being spaced from said first location and being selected and arranged to be a location that is not generally known, and said second color being selected to effect minimal contrast between said second printed matter in said second location and its immediate background;  
wherein the combination of said minimal contrast, said second confidential location, and said second microscale is constructed and arranged to substantially hide the existence and location of said second printed matter from the naked eye and prevent said second printed matter from being substantially detected or resolved unless a the viewing party knows the second confidential location and views said second printed matter ~~is viewed~~ using a magnification lens.
2. Cancelled
3. (Previously entered) The identification document of Claim 1 wherein said second printed matter consists of text rendered in a single color, said color being selected to effect minimal contrast between said second printed matter in said second confidential location and its immediate background.
4. (Previously Entered) The identification document of Claim 1 wherein said second printed matter consists of relatively dark toned text printed on a background color which is lighter toned than said text, said light tone and said darker tone constituting a tone difference, said tone

difference being selected to effect minimal contrast between said second printed matter in said second confidential location and its immediate background.

5. (Currently amended) The identification document-of Claim 1 wherein said second printed matter consists of relatively light toned text printed on a background color which is darker toned than said text, said light tone and said darker tone constituting a tone difference, said tone difference being selected to effect minimal contrast between said second printed matter in said second confidential location and its immediate background.

6. (Previously entered) The identification document of claim 1 wherein said identification document identifies a particular person and said identifying information comprises at least one of information specific to the identified person and information specific to the identification card.

7. Cancelled

8. (Original) The identification document of claim 1 wherein said first and second printed matter comprise alphanumeric characters.

9. (Original) The identification document of claim 1 wherein said first and second printed matter comprises at least two digits of the year of birth of a person identified in the document.

10. (Original) The identification document of claim 1 wherein said second printed matter is a graphical reproduction of said first printed matter.

11. Cancelled.

12. Cancelled.

13. (Currently amended) The identification document of Claim 1 ~~11~~ wherein said construction and arrangement to substantially hide ~~means for hiding~~ said second printed matter

further comprises printing said second printed matter within a graphical image having sufficient complexity to camouflage said second printed matter from the naked eye .

14. Cancelled.

15. Cancelled

16. Cancelled.

17. Cancelled

18. (Currently amended) The identification document of claim 1 ~~11~~ wherein said second ~~first~~ printed matter communicates said first ~~second~~ printed matter in an encrypted form.

19. (Currently amended) The identification document of claim 1 ~~11~~ wherein said first and second printed matter comprise identifying information that is determined most likely to be altered.

20. Cancelled.

21. (Previously entered) A method of printing a document containing identifying information for a particular person comprising:

providing a base card;

printing first information which is specific to the particular person identified on said base card at a first location and at a first scale enabling said printed information to be perceived without magnification; and

printing second information at a second micro scale and at a predetermined secret second location on said document, and in a second color, said second information comprising information capable of communicating the same identifying information as said first information, said second micro scale being significantly smaller than said first scale, said second location

being spaced from said first location, and said second color being selected to effect minimal contrast between said second information in said second location and its immediate background, the combination of said predetermined secret second location, minimal contrast and said second microscale substantially hiding said second information from the naked eye and preventing said second information from being clearly perceived unless said the second information is viewed using a magnifying lens by a party with knowledge of the predetermined secret second location.

22. Cancelled

23. (Previously entered) The method of Claim 21 wherein said step of printing said second information at said predetermined secret second location consists of printing said second information in a single color, said color being selected to effect minimal contrast between said second information - in said second location and its immediate background.

24. (Previously entered) The method of claim 21 wherein said step of printing said second information at said second predetermined secret location consists of printing said second information in a relatively dark toned color on a lighter toned background, said light tone and said darker tone constituting a tone difference, said tone difference being selected to effect minimal contrast between said second information in said second predetermined secret location and its immediate background.

25. (Previously entered) The method of claim 21 wherein said step of printing said second information at said second predetermined secret location consists of printing said second information in a relatively light toned color on a darker toned background, said light tone and said darker tone constituting a tone difference, said tone difference being selected to effect minimal contrast between said second information in said second predetermined secret location and its immediate background.

26. (Previously entered) The method of claim 21 wherein said step of printing said second information at said second predetermined secret location comprises graphically reproducing said first information.

**REMARKS****Status of the Claims:**

Claims 11, 14, 15, 16, and 20 have been cancelled to expedite prosecution and to narrow the issues for appeal. Applicant reserves the right to pursue claims of commensurate scope in one or more related applications.

Claims, 1, 5, 13, 18, and 19 are hereby amended to put the claims in a better form for appeal.

Claims 1, 3-6, 8-10, 13, 19, 20, 21, and 23-26 are now pending in the application, of which claims 1 and 21 are in independent form.

The amendments being made herein correct minor typographical, grammatical, and inadvertent errors, correct dependency relationships due to a canceled independent claim, and also put the claims in a better position for appeal and/or allowance.

Claim 1 was amended to correct a minor grammatical error (“the” instead of “a”) that appear to create an antecedent basis issue. Claim 1 was amended also to correct a minor typographical error (the extra phrase “is viewed” that was inadvertently inserted after “viewing party knows the second confidential location and views said second printed matter”).

Claim 5 was amended to correct a minor typographical error (changing the phrase “said tone” to “said tone difference”) to correct an antecedent basis problem and be consistent with the phrase immediately preceding it, namely “said light tone and said darker tone constituting a tone difference”.

Claims 13, 18, and 19 have been amended to depend from claim 1 instead of cancelled claim 11. No additional search is needed since the U.S. Patent and Trademark Office (hereafter “Office”) has already considered the limitations of claims 13, 18, and 19 in all previous Office Actions, going back to the first Office Action dated 9/28/1999.

In addition, claim 18 was amended to correct an inadvertent error wherein the phrases referring to the first and second printed matter were inadvertently reversed. That is, in claim 18, instead of this claim reading that the first printed matter communicates the second printed matter in an encrypted form, claim 18 as amended now states that the second printed matter communicates the first printed matter in an encrypted form. This is fully supported by the

Specification and does, in fact, correspond to the exact example cited in the Specification (see page 7, lines 10-13). In addition, because both cancelled claim 11 (from which claim 18 originally depended) and claim 1 (from which claim 18 has been amended to depend) recite that the second printed matter comprises information that communicates the same identifying information as said first printed matter, no change in claim scope results from this change.

All of the foregoing amendments should require only a cursory review by the Office, and consideration by the Office after Final is respectfully solicited.

Date: May 3, 2004

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Redmond et al.

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Marianne McLaughlin Downing

APPEAL BRIEF

MAIL STOP APPEAL BRIEF  
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Sir:

This brief is in furtherance of the Notice of Appeal filed March 2, 2004. Please charge the fee required under 37 CFR 1.17(f) or any deficiency to deposit account 50-2535 (see transmittal letter).

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### **REAL PARTY IN INTEREST**

The real party in interest is Digimarc ID Systems, by an assignment from the inventor to Polaroid Corporation recorded on 11/4/1998 at Reel 9570 Frame 0787 and by a subsequent assignment from Polaroid Corporation to Digimarc ID Systems, recorded on 2/19/2002 at reel 012621 and frame 0191.

### **RELATED APPEALS AND INTERFERENCES**

There are no related appeals or interferences.

### **STATUS OF CLAIMS**

Claims 1, 3-6, 8-11, 13-16, 18-21, and 23-26 stand finally rejected. The rejections of claims 1, 3-6, 8-10, 13, 18, 19, 21, and 23-26 are being appealed.

### **STATUS OF AMENDMENTS**

A previous amendment filed on March 2, 2004 was not entered. A further amendment is submitted herewith. The amendment submitted herewith cancels claims 11, 13, 15, and 20, without prejudice, to expedite prosecution and to narrow the issues for appeal. The amendment submitted herewith also rewrites dependent claims 13, 18, and 19 to depend from independent claim 1 instead of from cancelled independent claim 11. This amendment also fixes minor typographical and grammatical errors in claims 1 and 5. Entry of the amendment should not substantively affect the appeal because the scope of the amended claims (i.e., claims 1, 5, 13, 18, and 19) is not changed by the amendment, and Applicant has chosen not to appeal the rejections of claims 11, 14, 15, and 20.

### **SUMMARY OF THE INVENTION**

The invention relates to systems and methods for enhancing the tamper resistance of an identification document. One aspect of the invention is an identification document that includes

first and second printed matter, as seen in claim 1, where the first and second printed matter comprise information that conveys the same identifying information.<sup>1</sup> For example, the second printed matter can be a graphical reproduction of the first printed matter.<sup>2</sup> In another example, the first and second printed matter comprises at least two digits of the year of birth of a person identified in the document.<sup>3</sup> In still another example, the second printed matter communicates the same information as the first printed matter in an encrypted form.<sup>4</sup>

The first printed matter conveys identifying information and is printed at a first location and at a first scale that enable a viewing person to resolve the first printed matter without magnification.<sup>5</sup> The second printed matter, however, is printed at a second location that is confidential, spaced apart from the first location, and which is selected and arranged to be a location that is not generally known, and is rendered at a microscale that is significantly smaller than the first scale.<sup>6</sup> The second printed matter is also printed in a color that is selected to minimize the contrast between the second printed matter and its immediate background.<sup>7</sup> For example, the second printed matter can consist of text rendered in a single color, the color being selected to effect minimal contrast between the second printed matter in the second confidential location and its immediate background.<sup>8</sup> In another example, the second printed matter can consist of relatively dark toned text printed on a background color which is lighter toned than the text, the light tone and darker tone constituting a tone difference, the tone difference being

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<sup>1</sup> See FIGs. 1, 1A, 1B, 1C, and 1D and the accompanying description to these figures at page 5, line 17 through page 6, line 19.

<sup>2</sup> See page 10, lines 28-30.

<sup>3</sup> See FIGs. 1, 1A, 1B, 1C, and 1D and the accompanying description to these figures at page 5, line 17 through page 6, line 19.

<sup>4</sup> See page 7, lines 10-13.

<sup>5</sup> See, for example, FIG. 1 and the accompanying text at page 5, lines 14-17.

<sup>6</sup> See, for example, page 3, lines 14-23, FIGs. 1, 1A, 1B, 1C, and 1D and the accompanying description to these figures at page 5, line 17 through page 6, line 19, and see also page 7, lines 3-20.

<sup>7</sup> See, for example, page 9, line 11 through page 10, line 6.

<sup>8</sup> See, for example, page 8, line 11 through page 10, line 6 and also page 11, lines 4-11.

selected to effect minimal contrast between the second printed matter in the second confidential location and its immediate background; similarly, in another example, light toned text could be placed on a darker toned background.<sup>9</sup>

The combination of the minimal contrast, confidential location, and microscale substantially hide the existence and location of the second printed matter from the naked eye, and this combination prevents the second printed matter from being substantially detected or resolved unless a viewing party knows the confidential location and views the second printed matter using a magnification lens.<sup>10</sup> For example, the second printed matter can be printed within a graphical image having sufficient complexity to camouflage the second printed matter from the naked eye.<sup>11</sup>

Because the second printed matter conveys the same identifying information as the first printed matter, the identification document can help to facilitate detection of alteration or counterfeiting.<sup>12</sup>

Another aspect of the invention is a method of printing a document containing identifying information for a particular person. A base card is provided, and first information specific to the particular person identified on the base card is printed at a first location and at a first scale enabling the printed information to be perceived without magnification.<sup>13</sup> Second information is printed at a second microscale and at a predetermined secret second location on the document, and in a second color.<sup>14</sup> The second information is capable of communicating the same identifying information as the first information. The second microscale is significantly smaller than the first scale, the second location is spaced from the first location, and the second color is

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<sup>9</sup> See page 9, lines 19-26.

<sup>10</sup> See, for example, page 3, lines 1-23, page 5, line 14 through page 7, line 20, page 9, line 11 through page 10, line 6.

<sup>11</sup> See page 9, line 26 through page 10, line 2.

<sup>12</sup> See page 3, lines 14-23.

<sup>13</sup> See FIG. 1 and accompanying text at page 4, line 11 through page 5, line 17.

<sup>14</sup> See page 5, lines 14-26, page 7, lines 3-20, and page 9, line 11 through page 10, line 6.

selected to effect minimal contrast between the second information in the second location and its immediate background.<sup>15</sup>

The combination of the predetermined secret second location, the minimal contrast, and the second microscale substantially hide the second information from a naked eye and prevent the second information from being clearly perceived unless the second information is viewed using a magnifying lens, by a party with knowledge of the predetermined secret second location.<sup>16</sup>

### ISSUES

- Whether claims 1, 3-6, 8-10, 13, 18, and 19 are unpatentable as indefinite under 35 U.S.C. Section 112, second paragraph, when:

(a) a further amendment to claim 1, as provided in an amendment filed herewith, easily and simply corrects obvious and minor antecedent basis and typographical errors that apparently led to rejection of claim 1 (and claims 3-6 and 8-10, which are dependent therefrom);

(b) the Office Action has provided no reasons why claims 13, 18, and 19 are indefinite and why such claims fail to point out and distinctly claim the subject matter, especially where, at the time of this rejection, claims 13, 18, and 19 did not depend from claim 1 (which had acknowledged typographical errors) but instead depended from claim 11, which claim was also rejected as unpatentable for being indefinite under 35 U.S.C. Section 112, second paragraph, with no reasons given; and

(c) the recitation in aforementioned claims 13, 18, and 19, at the time of this rejection, was completely unchanged from what the recitation of these claims had been going into the

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<sup>15</sup> See, for example, page 3, lines 14-23, FIGs. 1, 1A, 1B, 1C, and 1D and the accompanying description to these figures at page 5, line 17 through page 6, line 19, and see also page 7, lines 3-20.

<sup>16</sup> See, for example, page 3, lines 1-23, page 5, line 14 through page 7, line 20, page 9, line 11 through page 10, line 6.

prior Office Action dated 3/26/2003 (that is, no amendments were made), and where the previous Office Action contained no rejections of claims 13, 18, and 19 (or their parent claim 11) under 35 U.S.C. Section 112, second paragraph, as being indefinite?

- Did the Office establish a prima facie case of obviousness in rejecting pending claims 1, 3-6, 8-10, 13, 18, 19, 21, and 23-26 under 35 U.S.C. Section 103(a) as being unpatentable over U.K. Patent GB-215961A (“UK Patent”) in view of U.S. Patent No. 1,428,278 to Dow (“Dow”) and further in view of U.S. Patent No. 4,239,261 to Richardson (“Richardson”) when:

- (a) the references – collectively – fail to detail all of the elements claimed;
- (b) there is no teaching or suggestion in the art that would have led an artisan to modify and combine the references as proposed;
- (c) modifying the UK patent with Richardson as the Examiner suggests changes a principle of operation of the UK patent;
- (d) modifying the UK patent with the Dow patent would render the UK patent unsatisfactory for its intended purpose; and
- (e) there would be no reasonable expectation of success even if the UK patent were modified with either or both of the other two cited references?

### **GROUPING OF CLAIMS**

Claims 1, 6, and 8-10 are grouped together and stand or fall together.

Claims 21 and 26 are grouped together and stand or fall together.

Claims 3-5, 13, 18, 19, and 23-25 are separately patentable, as detailed below.

The rejection of claims 11, 13, 15, and 20 is not being appealed, and applicant reserves the right to pursue these claims in a related application.

## ARGUMENT

The claims are patentable over the cited art for the reasons set forth below.

### Argument, § 112, Second Paragraph

#### Claim 1

Claim 1 was rejected as being indefinite because of two minor typographical errors:

(a) claim 1 recited the limitation “the viewing party”, in line 15, where it was alleged that there was insufficient antecedent basis for this limitation, and

(b) the extra phrase “is viewed” was inadvertently inserted in claim 1 after the phrase “viewing party knows the second confidential location and views said second printed matter,” rendering the meaning unclear.

The first error was an inadvertent typographical error (the word “the” was used instead of the word “a”), and this error is corrected in the amendment filed herewith to read “a viewing party” instead.

The second error likewise was an inadvertent typographical error and the phrase was deleted in the amendment filed herewith. Applicants attempted to correct these two minor errors in an amendment after Final filed on 3/2/2004, but that amendment was not entered. With the corrections to these minor errors fixed in the amendment filed herewith, claim 1 particularly points out and claim what the Applicants regard as the invention, namely:

1. *An identification document comprising:*

*first printed matter rendered at a first location on said document and at a first scale enabling said first printed matter to be resolved by a viewing person without magnification, said first printed matter conveying identifying information;*

*second printed matter comprising information that communicates the same identifying information as said first printed matter, the second printed matter rendered at a second microscale and at a second confidential location on said document and in a second color, said*



*second microscale being significantly smaller than said first scale, said second confidential location being spaced from said first location and being selected and arranged to be a location that is not generally known, and said second color being selected to effect minimal contrast between said second printed matter in said second location and its immediate background;*

*wherein the combination of said minimal contrast, said second confidential location, and said second microscale is constructed and arranged to substantially hide the existence and location of said second printed matter from the naked eye and prevent said second printed matter from being substantially detected or resolved unless a viewing party knows the second confidential location and views said second printed matter using a magnification lens.*

For at least the reasons above, Applicants thus respectfully request that the rejection of claim 1 as being unpatentable under 35 USC 112, second paragraph be reversed.

### **Claim 3**

Claim 3 depends from claim 1, and, because the Office Action provided no specific details as to why claim 3 fails to satisfy 35 U.S.C. 112, second paragraph, Applicants assume that the rejection of claim 3 on these grounds occurred because of claim 3's dependence on claim 1, which was rejected on these grounds. Applicants can find nothing in the recitation of claim 3 itself (apart from its dependence on claim 1) to justify a rejection under 35 U.S.C. 112, second paragraph. Claim 3 reads as follows:

3. *The identification document of Claim 1 wherein said second printed matter consists of text rendered in a single color, said color being selected to effect minimal contrast between said second printed matter in said second confidential location and its immediate background.*

With the amendment to claim 1 noted above, the parent claim to claim 3 overcomes the rejection under 35 U.S.C. 112, second paragraph. Applicants thus respectfully request that the rejection of

claim 3 as being unpatentable under 35 USC 112, second paragraph be reversed.

#### **Claim 4**

Claim 4 depends from claim 1, and, because the Office Action provided no specific details as to why claim 4 fails to satisfy 35 U.S.C. 112, second paragraph, Applicants assume that the rejection of claim 4 on these grounds occurred because of claim 4's dependence on claim 1, which was rejected on these grounds. Applicants can find nothing in the recitation of claim 4 itself (apart from its dependence on claim 1) to justify a rejection under 35 U.S.C. 112, second paragraph. Claim 4 reads as follows:

4. *The identification document of Claim 1 wherein said second printed matter consists of relatively dark toned text printed on a background color which is lighter toned than said text, said light tone and said darker tone constituting a tone difference, said tone difference being selected to effect minimal contrast between said second printed matter in said second confidential location and its immediate background.*

With the amendment to claim 1 noted above, the parent claim to claim 4 overcomes the rejection under 35 U.S.C. 112, second paragraph. Applicants thus respectfully request that the rejection of claim 4 as being unpatentable under 35 USC 112, second paragraph be reversed.

#### **Claim 5**

Claim 5 depends from claim 1, and, because the Office Action provided no specific details as to why claim 5 fails to satisfy 35 U.S.C. 112, second paragraph, Applicants assume that the rejection of claim 5 on these grounds occurred because of claim 5's dependence on claim 1, which was rejected on these grounds. Applicants can find nothing in the recitation of claim 5 itself (apart from its dependence on claim 1) to justify a rejection under 35 U.S.C. 112, second paragraph. Claim 5 (as amended in the accompanying amendment) reads as follows:

5. *The identification document of Claim 1 wherein said second printed matter consists of relatively light toned text printed on a background color which is darker toned than said text, said light tone and said darker tone constituting a tone difference, said tone difference being selected to effect minimal contrast between said second printed matter in said second confidential location and its immediate background.*

With the amendment to claim 1 noted above, the parent claim to claim 5 overcomes the rejection under 35 U.S.C. 112, second paragraph. Applicants thus respectfully request that the rejection of claim 5 as being unpatentable under 35 USC 112, second paragraph be reversed.

#### **Claim 6**

Claim 6 depends from claim 1, and, because the Office Action provided no specific details as to why claim 6 fails to satisfy 35 U.S.C. 112, second paragraph, Applicants assume that the rejection of claim 6 on these grounds occurred because of claim 6's dependence on claim 1, which was rejected on these grounds. Applicants can find nothing in the recitation of claim 6 itself (apart from its dependence on claim 1) to justify a rejection under 35 U.S.C. 112, second paragraph. Claim 6 reads as follows:

6. *The identification document of claim 1 wherein said identification document identifies a particular person and said identifying information comprises at least one of information specific to the identified person and information specific to the identification card.*

With the amendment to claim 1 noted above, the parent claim to claim 6 overcomes the rejection under 35 U.S.C. 112, second paragraph. Applicants thus respectfully request that the rejection of claim 6 as being unpatentable under 35 USC 112, second paragraph be reversed.

**Claim 8**

Claim 8 depends from claim 1, and, because the Office Action provided no specific details as to why claim 8 fails to satisfy 35 U.S.C. 112, second paragraph, Applicants assume that the rejection of claim 8 on these grounds occurred because of claim 8's dependence on claim 1, which was rejected on these grounds. Applicants can find nothing in the recitation of claim 8 itself (apart from its dependence on claim 1) to justify a rejection under 35 U.S.C. 112, second paragraph. Claim 8 reads as follows:

8. *The identification document of claim 1 wherein said first and second printed matter comprise alphanumeric characters.*

With the amendment to claim 1 noted above, the parent claim to claim 8 overcomes the rejection under 35 U.S.C. 112, second paragraph. Applicants thus respectfully request that the rejection of claim 8 as being unpatentable under 35 USC 112, second paragraph be reversed.

**Claim 9**

Claim 9 depends from claim 1, and, because the Office Action provided no specific details as to why claim 9 fails to satisfy 35 U.S.C. 112, second paragraph, Applicants assume that the rejection of claim 9 on these grounds occurred because of claim 9's dependence on claim 1, which was rejected on these grounds. Applicants can find nothing in the recitation of claim 9 itself (apart from its dependence on claim 1) to justify a rejection under 35 U.S.C. 112, second paragraph. Claim 9 reads as follows:

9. *The identification document of claim 1 wherein said first and second printed matter comprises at least two digits of the year of birth of a person identified in the document.*

With the amendment to claim 1 noted above, the parent claim to claim 9 overcomes the rejection under 35 U.S.C. 112, second paragraph. Applicants thus respectfully request that the rejection of

claim 9 as being unpatentable under 35 USC 112, second paragraph be reversed.

### **Claim 10**

Claim 10 depends from claim 1, and, because the Office Action provided no specific details as to why claim 10 fails to satisfy 35 U.S.C. 112, second paragraph, Applicants assume that the rejection of claim 9 on these grounds occurred because of claim 10's dependence on claim 1, which was rejected on these grounds. Applicants can find nothing in the recitation of claim 10 itself (apart from its dependence on claim 1) to justify a rejection under 35 U.S.C. 112, second paragraph. Claim 10 reads as follows:

*10. The identification document of claim 1 wherein said second printed matter is a graphical reproduction of said first printed matter.*

With the amendment to claim 1 noted above, the parent claim to claim 10 overcomes the rejection under 35 U.S.C. 112, second paragraph. Applicants thus respectfully request that the rejection of claim 10 as being unpatentable under 35 USC 112, second paragraph be reversed.

### **Claim 13**

Claim 13 was rejected as indefinite, but the Office Action never provided any details as to how or why claim 13 was indefinite for failing to particularly point out and distinctly claim the subject matter. Claim 13, at the time of this rejection, depended from independent claim 11 (now cancelled), which was also rejected as indefinite under 35 U.S.C. 112, second paragraph without any reasons or details given for such rejection. Claim 13 as amended in the accompanying amendment to depend from claim 1, now reads as follows:

*13. The identification document of Claim 1 wherein said construction and arrangement to substantially hide said second printed matter further comprises printing said second printed matter within a graphical image having sufficient complexity to camouflage said second printed*

*matter from the naked eye.*

The recitation of claim 13 going into this rejection on 12/2/2003 had not changed since an earlier Office Action dated 3/26/2003, and this earlier Office Action did not reject claim 13 on this ground. Further, the Office had never previously rejected claim 13 on this ground. Applicants thus believe that the rejection of claim 13 is an inadvertent error in the Office Action.

In a reply to the Office filed on 3/2/2004, Applicants attempted to point this possible error out to the Examiner and also requested that the Examiner provide a full explanation of the deficiency of claim 13 under 35 USC 112, including the particular term(s) or limitation(s) which render claim 13 indefinite and a statement as to why such term or limitation renders claim 13 indefinite, as required by MPEP section 706.03(d). Although Applicants received an Advisory Action from the Examiner dated April 5, 2004, the Advisory Action contained no reference to Applicant's comments and no further explanation of the basis of the rejection under 35 U.S.C. 112 of claim 13. Accordingly, Applicants thus respectfully request that the rejection of claim 13, 18as being unpatentable under 35 USC 112, second paragraph be reversed.

### **Claim 18**

Claims 18 was rejected as indefinite, but the Office Action never provided any details as to how or why claim 18 was indefinite for failing to particularly point out and distinctly claim the subject matter. Claim 18, at the time of this rejection, depended from independent claim 11 (now cancelled), which was also rejected as indefinite under 35 U.S.C. 112, second paragraph without any reasons or details given for such rejection. Claim 18, as amended in the accompanying amendment to depend from claim 1, now reads as follows:

*18. The identification document of claim 1 wherein said second printed matter communicates said first printed matter in an encrypted form.*

The recitation of claim 18 going into this rejection on 12/2/2003 had not changed since an earlier

Office Action dated 3/26/2003, and this earlier Office Action did not reject claim 18 on this ground. Further, the Office had never previously rejected claim 18 on this ground. Applicants thus believe that the rejection of claim 18 may have been an inadvertent error in the Office Action.

In a reply to the Office filed on 3/2/2004, Applicants attempted to point this possible error out to the Examiner and also requested that the Examiner provide a full explanation of the deficiency of claim 18 under 35 USC 112, including the particular term(s) or limitation(s) which render claim 18 indefinite and a statement as to why such term or limitation renders claim 18 indefinite, as required by MPEP section 706.03(d). Although Applicants received an Advisory Action from the Examiner dated April 5, 2004, the Advisory Action contained no reference to Applicant's comments and no further explanation of the basis of the rejection under 35 U.S.C. 112 of claim 18. Accordingly, Applicants thus respectfully request that the rejection of claim 18 as being unpatentable under 35 USC 112, second paragraph be reversed.

### **Claim 19**

Claims 19 was rejected as indefinite, but the Office Action never provided any details as to how or why claim 19 was indefinite for failing to particularly point out and distinctly claim the subject matter. Claim 19, at the time of this rejection, depended from independent claim 11 (now cancelled), which was also rejected as indefinite under 35 U.S.C. 112, second paragraph without any reasons or details given for such rejection. Claim 19, as amended in the accompanying amendment to depend from claim 1, now reads:

*19. The identification document of claim 1 wherein said first and second printed matter comprise identifying information that is determined most likely to be altered.*

The recitation of claim 19 going into this rejection on 12/2/2003 had not changed since an earlier Office Action dated 3/26/2003, and this earlier Office Action did not reject claim 19 on this ground. Further, the Office had never previously rejected claim 19 on this ground. Applicants

thus believe that the rejection of claim 19 may have been an inadvertent error in the Office Action.

In a reply to the Office filed on 3/2/2004, Applicants attempted to point this possible error out to the Examiner and also requested that the Examiner provide a full explanation of the deficiency of claim 19 under 35 USC 112, including the particular term(s) or limitation(s) which render claim 19 indefinite and a statement as to why such term or limitation renders claim 19 indefinite, as required by MPEP section 706.03(d). Although Applicants received an Advisory Action from the Examiner dated April 5, 2004, the Advisory Action contained no reference to Applicant's comments and no further explanation of the basis of the rejection under 35 U.S.C. 112 of claim 19. Accordingly, Applicants thus respectfully request that the rejection of claim 19 as being unpatentable under 35 USC 112, second paragraph be reversed.

**Argument, § 103(a)**

Claims 1, 3-6, 8-10, 13, 18, 19, 21 stand rejected under 35 USC 103(a) as being unpatentable over UK Patent GB-2159461A ("the UK patent") in view of US 1428278 to Dow ("the Dow patent") and further in view of Richardson (4239261) ("the Richardson patent"). The rejection of each of these claims is addressed in turn.

**Claim 1**

Claim 1 reads as follows:

1. *An identification document comprising:  
first printed matter rendered at a first location on said document and at a first scale enabling said first printed matter to be resolved by a viewing person without magnification, said first printed matter conveying identifying information;  
second printed matter comprising information that communicates the same identifying information as said first printed matter, the second printed matter rendered at a second*



*microscale and at a second confidential location on said document and in a second color, said second microscale being significantly smaller than said first scale, said second confidential location being spaced from said first location and being selected and arranged to be a location that is not generally known, and said second color being selected to effect minimal contrast between said second printed matter in said second location and its immediate background;*

*wherein the combination of said minimal contrast, said second confidential location, and said second microscale is constructed and arranged to substantially hide the existence and location of said second printed matter from the naked eye and prevent said second printed matter from being substantially detected or resolved unless a viewing party knows the second confidential location and views said second printed matter using a magnification lens.*

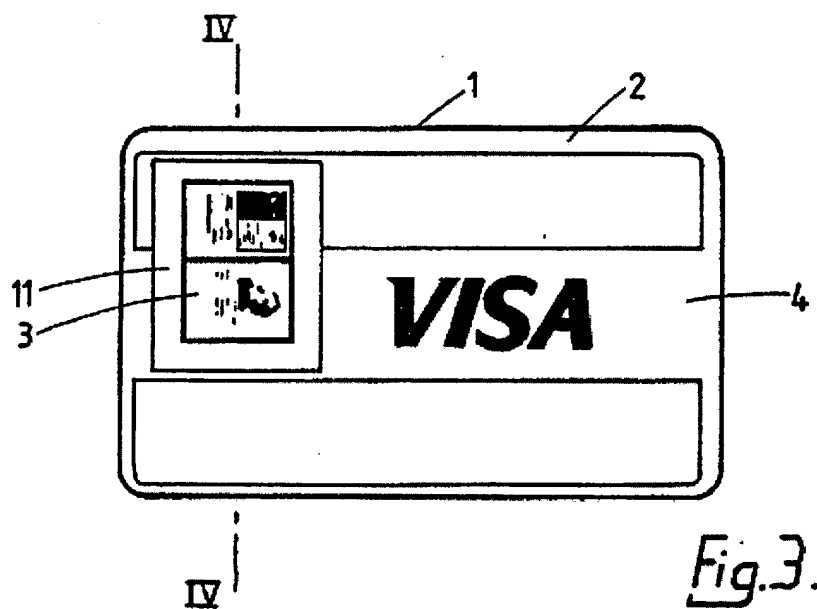
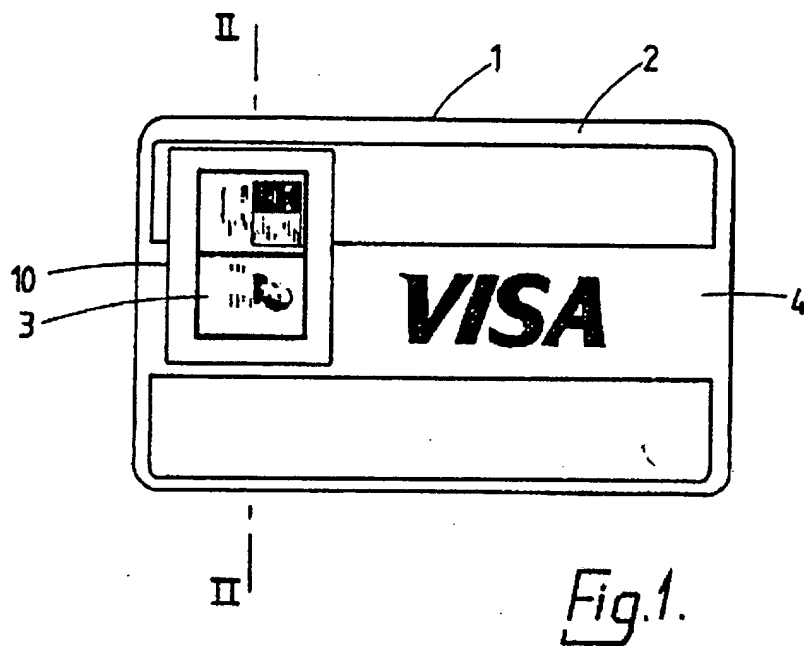
The UK patent is understood to disclose an identity card, such as a credit card, comprising a sheet (1) having markings on one side of the card (e.g., embossing or holography) indicating information such as name and serial number and which also includes also microprint or microfilm data (3) formed or applied to a specially designated area on the sheet.<sup>17</sup> Providing microfilm or microprint data (3) is disclosed in two different ways: (a) a transparent window (10) formed thereon, where microfilm or microprint data (3) is printed over or applied to the window (10).<sup>18</sup> (see FIG. 1 of the UK patent, shown on the following page), or (b) an area 11 of the sheet (1) having a backing of white or other suitable light color, to which the microfilm or microprint data (3) is applied, so that the microfilm or microprint data (3) can be effectively viewed by reflected light.<sup>19</sup> (See FIG. 3 of the UK patent, shown on the following page).

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<sup>17</sup> See UK patent at col. 1, lines 5-126.

<sup>18</sup> See FIG. 1 of UK patent and also UK patent at col. 1, lines 40-63.

<sup>19</sup> See FIG. 3 of UK patent and also UK patent at col. 1, lines 78-94.



The microfilm or microprint data (3) of the UK patent is specifically described as  
“microfilm or microprint information 3 [that] cannot be ascertained or readily ascertained by the

naked eye (even with the aid of a magnifying lens) during normal use of the card so that such information remains in effect confidential” [emphasis added]. In addition, as FIGs. 1 and 3 of the UK patent illustrate, the location and existence of the microfilm or microprint data (3) on the identity card is visible to a naked human eye.

For the case of (a) above (transparent window (10)), microfilm or microprint data (3) on the window 10 can be viewed, on an enlarged scale, by transmitting light through the window (10) and viewing the microfilm or microprint data (3) using a suitable reader or projector.<sup>20</sup> For the case of (b) above (white/light colored area (11)), microfilm or microprint data (3) on the white/light colored area can be viewed by reflected light, such as an epidiascope type of projector.<sup>21</sup> Reading the microfilm or microprint data (3) of the UK patent is very similar to how conventional “microfilm” or “microfiche” readers read a piece of microfilm. As is readily understood, one cannot read a piece of true microfilm – which is what is disclosed and illustrated in the UK patent --by viewing it with a magnification lens.

The Examiner, however, wrongly asserts that the microfilm or microprint data (3) of the UK patent can be modified via the Dow and Richardson patents to be equivalent to the second printed matter of claim 1. This is incorrect for several reasons.

First, as noted previously, the UK patent expressly states that the microfilm or microprint data (3) of the UK patent cannot be ascertained by the naked eye even with the aid of a magnification lens. Moreover, the UK patent states that providing microfilm or microprint data (3) such that it cannot be ascertained by the naked eye, even with the aid of a magnification lens, is a feature helps to keep the microfilm or microprint data confidential. **The UK patent thus never teaches or suggests (in fact, the UK patent effectively “teaches away” from) any modification whereby the microfilm or microprint data (3) becomes data that is resolved using a magnification lens.**<sup>22</sup>

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<sup>20</sup> See UK patent at col. 1, lines 74-77.

<sup>21</sup> See UK patent at col. 1, lines 82-94 and col. 2, lines 1-10.

<sup>22</sup> See UK patent, col. 1, line 127 through col. 2, line 10.

In addition, any modification to the microfilm or microprint data of the UK patent that would make the microfilm or microprint data able to be ascertained by the naked eye with the aid of a magnification lens (i.e., by modifying with the Richardson patent, as the Examiner suggests)<sup>23</sup> expressly changes the principle of operation of the UK patent. As MPEP 2143.01 states, if a proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings are not sufficient to render the claims *prima facie* obvious.

The Office Action concedes that neither the UK patent nor the Dow patent discloses the teachings of claim 1 wherein the second printed matter can be substantially resolved by viewing with a magnification lens<sup>24</sup>. As clearly explained above, there are important reasons why the UK patent cannot be modified by the Richardson patent to achieve the second printed matter of claim 1 (which can be resolved by viewing with a magnification lens) and why there is no motivation or teaching in any of the cited art to do so. The Examiner's apparent disregard of an inconsistency between an express limitation of claim 1 (the second printed matter being viewable using a magnification lens) and an express requirement of the UK patent (that its microfilm data cannot be ascertained by the naked eye even with the aid of a magnifying lens) is an error that fatally flaws all of the Examiner's rejections of claims that include this limitation. As will be described herein, none of the other cited references compensate for this fatal flaw.

The Examiner cites Dow for allegedly teaching additional aspects of claim 1, namely for allegedly teaching claim 1's recitation that the second printed matter has a second color selected to effect minimal contrast between the second printed matter in its second location and its immediate background. There are several significant problems with the Examiner's modification of the UK patent with Dow

- (1) Dow does not teach what the Examiner says it does;
- (2) Even if Dow were viewed to teach what the Examiner says it does, there is no

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<sup>23</sup> See Final Office Action at page 5, line 6 through page 6, line 2.

<sup>24</sup> See Final Office Action at page 5, lines 7-11.

suggestion or modification in any of the art of record to modify the microfilm of the UK patent by printing it so as to have “minimal contrast” with its background (for purposes of hiding it);

(3) Modifying the microfilm of the UK patent as suggested would render the UK patent unsatisfactory for its intended purpose; and

(4) Even if the UK patent were modified by Dow, there would be no reasonable expectation of success, because any “minimal contrast” modification to the UK patent would render it technically impossible to view the microfilm or microprint of the UK patent.

Each of the above assertions is taken in turn.

First, The Examiner contends that Dow teaches the minimal contrast recitation of claim 1.

Dow describes printing using more than one ink (e.g., two inks), where the two inks look the same to the naked eye but where the two inks would look completely different when the inks are viewed using **specific specialized equipment** used to bring out specific optical properties of the ink.<sup>25</sup> Thus, a design could be printed where various portions appear to have the same color but, when viewed using the specific specialized equipment that is sensitive to true or fundamental colors, a difference can be seen in the various portions printed in the different inks.<sup>26</sup> For example, Dow discloses printing an image using a single color of a special ink that appears, when viewed using a specialized piece of equipment, to have been broken down into its fundamental colors (e.g., green breaks down into yellow and blue).<sup>27</sup>

At best, Dow thus discloses printing an image in a color that, to the naked eye, looks the same as its immediate background, not printing an image in a color that, to the naked eye, has minimal contrast with its immediate background, as required by claim 1. However, under magnification, it would be impossible to tell which information (printed as Dow suggests) constitutes the second printed matter because, because even under magnification, Dow’s inks would still look like the same color—there would be no “minimal contrast” (or other contrast) to

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<sup>25</sup> See Dow at see Col. 1, line 44 through col. 2, line 76.

<sup>26</sup> See Dow at lines 41-76.

<sup>27</sup> See Dow at lines 41-72.

the naked eye, to help make the second printed matter perceivable when magnified.. As Dow expressly states, one would need the “proper apparatus” (col. 1, lines 18-19), namely the spectroscope or equivalent equipment. that is sensitive to true or fundamental colors, for a naked eye to detect the difference between the two identical colors. Applicants fail to see how one skilled in the art would have a reasonable expectation that modifying the UK reference with the Dow reference could be successful in achieving “minimal contrast”, because the Dow reference does not teach or suggest any type of minimal contrast.

The Richardson reference does not compensate for the deficiencies of Dow and does not itself teach any type of minimal contrast. Richardson never teaches or suggests selecting colors to achieve minimal contrast with a background color (as a way to help to hide the existence and/or location of a piece of information). Rather, Richardson describes attaching an encoded marker or label to an article “in such a manner that it is not readily visible except to an educated observer” where there is a “lack of knowledge as to the exact location of the marker”<sup>28</sup>. The only teaching or suggestions in Richardson of a so-called “manner” of attaching and/or providing the marker such that it will be “not readily visible” is to provide a label that is “sufficiently small in size so as to be substantially invisible to the casual observer when mounted on the article to be identified”.<sup>29</sup> The Examiner points out that Richardson describes use of fluorescent substances (UV or IR), which can be made visible when exposed with a specialized light source, as helping to provide a confidential location for a marker applied to an article, but Applicants note that such covert materials are not described or illustrated as having “minimal contrast” with any other colors on the article. Richardson never teaches using minimal contrast as a way to substantially hide the location of information and/or the information itself.

Assuming *arguendo* that a reference somehow could be produced that somehow did teach minimal contrast, Applicants do not see how there would be any motivation to modify the UK patent microfilm to have minimal contrast with its immediate background. The UK patent

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<sup>28</sup> See Richardson at col. 3, lines 50-60.

<sup>29</sup> See Richardson at col. 4, lines 27-30.

already states that because the microfilm or microprint information (3) cannot be ascertained by the naked eye, even with the aid of a magnification lens, the microfilm or microprint information remains confidential.<sup>30</sup> No teaching or suggestion is given in the UK patent that further hiding of the microfilm information is necessary or advantageous. The existence and location of the microfilm on the UK card is illustrated as being ascertainable to the naked eye (see FIGS. 1 and 3 of the UK patent, above); no attempt is described, taught, or suggested to hide the existence or location of the microfilm.

Furthermore, those skilled in the art readily recognize that modifying the UK patent to have minimal contrast between the microfilm and its immediate background would render the UK patent unsatisfactory for its intended purpose. Note that the UK patent never teaches or suggests “hiding” its microfilm/microprint in a background of a similar or minimally contrasting color. This is because one needs either transmitted light (putting microfilm over a clear background, as described in the UK patent) or reflected light (putting microfilm over a white or light background, as described in the UK patent) to be able to ascertain the information on the microfilm. A background color that has a minimal contrast with the intensity, darkness, or hue of the microprint would make it difficult to impossible to be able to read the information off of the microfilm, **thereby rendering the UK patent unsatisfactory for the stated purpose of reading the information off of the microfilm (via a reader) as a means to compare the microfilm with bank records, the appearance of the person, etc.**<sup>31</sup>

Because the microfilm cannot easily be read (even using a reader), and might even be impossible to read, if the microfilm information is printed so as to have minimal contrast with its background, Applicants **fail to see how there could be a reasonable expectation of success in making such a modification**. Those skilled in the art would recognize that such a modification would not work.

As shown and described above, there is no suggestion or motivation, either in the cited art

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<sup>30</sup> See UK patent at col. 1, line 127 through col. 2, line 1.

<sup>31</sup> See UK Patent at col. 2, lines 1-39.

of record or in the ordinary skill of the art, to modify the UK patent with Dow and/or Richardson. Further, such modifications would provide no reasonable expectation of success, as the microfilm of the UK patent would be rendered virtually unreadable. Such modifications would also change a principle of operation of the UK patent in a technically improper way, by attempting to specify that microfilm be a small scale print that is readable by a magnification lens, in express contravention of the UK patent's use. Finally, such modifications, even if made, would still not teach all elements of claim 1 expressly or inherently, because the minimal contrast limitation is not taught or suggested in any of the art of record.

For at least the above reasons, the Examiner has failed to set forth a *prima facie* case of obviousness under § 103, and the rejection of claim 1 should be reversed.

### Claim 3

Claim 3 depends from claim 1 and reads as follows:

3. *The identification document of Claim 1 wherein said second printed matter consists of text rendered in a single color, said color being selected to effect minimal contrast between said second printed matter in said second confidential location and its immediate background.*

Regarding claims 3-6 and 8-10, the Office has failed to establish that the cited art teaches all of the elements of these claims.

In particular for claim 3, the Office has failed to show how the combination of references discloses second printed matter wherein "*said second printed matter consists of text rendered in a single color, said color being selected to effect minimal contrast between said second printed matter in said second confidential location and its immediate background.*" The Office has not shown or provided any details as to how any of the cited art, taken alone or in combination, teaches the elements of claim 3. Claim 3 stands rejected based on the UK patent in view of the Dow patent and the Richardson patent, yet, as described above in connection with claim 1, none



of these references teach or suggest any type “minimal contrast” between the second printed matter and its immediate background, nor do they teach or suggest as selecting a color to effect such minimal contrast. The combined teachings, therefore, fail to teach all of the elements of claim 3. As such, the Office has not established a prima facie case of obviousness for claim 3, and the rejection of claim 3 under 35 U.S.C. 103(a) should be reversed.

#### Claim 4

Claim 4 depends from claim 1 and reads as follows:

4. *The identification document of Claim 1 wherein said second printed matter consists of relatively dark toned text printed on a background color which is lighter toned than said text, said light tone and said darker tone constituting a tone difference, said tone difference being selected to effect minimal contrast between said second printed matter in said second confidential location and its immediate background.*

Regarding claims 3-6 and 8-10, the Office has failed to establish that the cited art teaches all of the elements of these claims.

In particular for claim 4, the Office has failed to show how the combination of references discloses second printed matter wherein the second printed matter consists of “*relatively dark toned text printed on a background color which is lighter toned than said text, said light tone and said darker tone constituting a tone difference, said tone difference being selected to effect minimal contrast between said second printed matter in said second confidential location and its immediate background.*” The Office has not shown or provided any details as to how any of the cited art, taken alone or in combination, teaches the elements of claim 4. Claim 4 stands rejected based on the UK patent in view of the Dow patent and the Richardson patent, yet, as described above in connection with claim 1, none of these references teach or suggest any type of “tone difference”. The combined teachings, therefore, fail to teach all of the elements of claim 4. As such, the Office has not established a prima facie case of obviousness for claim 4, and the

rejection of claim 4 under 35 U.S.C. 103(a) should be reversed.

### **Claim 5**

Claim 5 depends from claim 1, and reads as follows:

5. *The identification document-of Claim 1 wherein said second printed matter consists of relatively light toned text printed on a background color which is darker toned than said text, said light tone and said darker tone constituting a tone difference, said tone difference being selected to effect minimal contrast between said second printed matter in said second confidential location and its immediate background.*

Regarding claims 3-6 and 8-10, the Office has failed to establish that the cited art teaches all of the elements of these claims.

In particular for claim 5, the Office has failed to show how the combination of references discloses second printed matter wherein the second printed matter consists of “*relatively light toned text printed on a background color which is darker toned than said text, said light tone and said darker tone constituting a tone difference, said tone difference being selected to effect minimal contrast between said second printed matter in said second confidential location and its immediate background.*” The Office has not shown or provided any details as to how any of the cited art, taken alone or in combination, teaches the elements of claim 5. Claim 5 stands rejected based on the UK patent in view of the Dow patent and the Richardson patent, yet, as described above in connection with claim 1, none of these references teach or suggest any type of “tone difference”. The combined teachings, therefore, fail to teach all of the elements of claim 5. As such, the Office has not established a prima facie case of obviousness for claim 5, and the rejection of claim 5 under 35 U.S.C. 103(a) should be reversed.

### **Claim 6**

Claim 6 depends from claim 1 and reads as follows:

6. *The identification document of claim 1 wherein said identification document identifies a particular person and said identifying information comprises at least one of information specific to the identified person and information specific to the identification card.*

Claim 6 stands or falls with claim 1 and is patentable for the same reasons as claim 1.

#### **Claim 8**

Claim 8 depends from claim 1 and reads as follows:

8. *The identification document of claim 1 wherein said first and second printed matter comprise alphanumeric characters.*

Claim 8 stands or falls with claim 1 and is patentable for the same reasons as claim 1.

#### **Claim 9**

Claim 9 depends from claim 1 and reads as follows:

9. *The identification document of claim 1 wherein said first and second printed matter comprises at least two digits of the year of birth of a person identified in the document.*

Claim 9 stands or falls with claim 1 and is patentable for the same reasons as claim 1.

#### **Claim 10**

Claim 10 depends from claim 1 reads as follows:

10. *The identification document of claim 1 wherein said second printed matter is a graphical reproduction of said first printed matter.*

Claim 10 stands or falls with claim 1 and is patentable for the same reasons as claim 1.

### Claim 13

Claim 13 as amended in the accompanying amendment to depend from claim 1, now reads as follows:

13. *The identification document of Claim 1 wherein said construction and arrangement to substantially hide said second printed matter further comprises printing said second printed matter within a graphical image having sufficient complexity to camouflage said second printed matter from the naked eye.*

Regarding claim 13, the Office has failed to establish that the cited art teaches all of the elements of these claims. In particular for claim 13 the Office has failed to show how the combination of references discloses “*printing said second printed matter within a graphical image having sufficient complexity to camouflage said second printed matter from the naked eye.*” The Office has not shown or provided any details as to how any of the cited art, taken alone or in combination, teaches the elements of claim 13. Claim 13 stands rejected based on the UK patent in view of the Dow patent and the Richardson patent. As noted previously in connection with claim 1, The UK patent already states that because the microfilm or microprint information itself cannot be ascertained by the naked eye, even with the aid of a magnification lens, the microfilm or microprint information remains confidential.<sup>32</sup> No teaching or suggestion is given in the UK patent that further hiding of the microfilm information, such as by printing the microfilm within a complex graphical image as recited in claim 13, is necessary or advantageous.

The existence and location of the microfilm on the UK card is illustrated as being ascertainable to the naked eye (see FIGS. 1 and 3 of the UK patent, shown previously), and no attempt is

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<sup>32</sup> See UK patent at col. 1, line 127 through col. 2, line 1.

described, taught, or suggested to hide the existence or location of the microfilm.

The Office has not shown that any of the cited art teaches or suggests the limitations of claim 13. Further, the Office has not shown that any of the cited art teaches or suggests the desirability of modifying the UK patent so as to hide the existence and/or location of the microfilm. As such, the Office has not established a prima facie case of obviousness for claim 13, and the rejection of claim 13 under 35 U.S.C. 103(a) should be reversed.

### Claim 18

Claim 18, as amended in the accompanying amendment to depend from claim 1, now reads as follows:

18. *The identification document of claim 1 wherein said second printed matter communicates said first printed matter in an encrypted form.*

Regarding claim 18, the Office has failed to establish that the cited art teaches all of the elements of these claims. In particular for claim 18 the Office has failed to show how the combination of references discloses that the “*second printed matter communicates said first printed matter in an encrypted form*” The Office has not shown or provided any details as to how any of the cited art, taken alone or in combination, teaches the elements of claim 18. Rather, the Office has instead stated that it would have been obvious to one of ordinary skill in the art to place any desired indicia for the first and second printed matter, since the indicia would only depend on the intended use of the identification documents, and the Office further stated that the claimed printed matter (of claim 18) is not functionally related to the substrate.<sup>33</sup>

In contrast to the Examiner’s assertions, the second printed matter of claim 18 is functionally related to the substrate (identification document). Claim 18, when read in conjunction with the limitations of its parent claim, states that the second printed matter

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<sup>33</sup> See Final Office Action at page 6, lines 7-12.

comprises information that communicates, in an encrypted form, the same identifying information as said first printed matter, the second printed matter rendered at a second microscale and at a second confidential location on said document and in a second color, said second microscale being significantly smaller than said first scale, said second confidential location being spaced from said first location and being selected and arranged to be a location that is not generally known, and said second color being selected to effect minimal contrast between said second printed matter in said second location and its immediate background. These limitations of claim 18, including the limitation of communicating the first printed matter in an encrypted form, do have a functional relationship to the identification document in that they help make duplication of the identification document difficult and help to make detections of alterations or counterfeiting of the identification document easier to detect.<sup>34</sup>

Claim 18 stands rejected based on the UK patent in view of the Dow patent and the Richardson patent. As noted previously in connection with claim 1, the UK patent already states that because the microfilm or microprint information itself cannot be ascertained by the naked eye, even with the aid of a magnification lens, the microfilm or microprint information remains confidential.<sup>35</sup> Because the microprint information of the UK patent remains confidential, no teaching or suggestion is given in the UK patent that further modifications to the information contained within its microfilm information, such as encrypting the microfilm information, is necessary or advantageous. The Dow and Richardson references are likewise silent as to any teaching or suggestion as to any encryption of information.

The Office states, in connection with claim 18, that if the prior art structure is capable of performing the intended use, it meets the claim<sup>36</sup> The problem is, when all of the limitations of the parent claim are read into claim 18 (see the recitation of claim 1, above), there is no “prior art structure” to perform anything. The Office has not shown that any of the cited art teaches or

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34 See Specification at page 3, lines 1-23 and page 6, line 9 through page 7, line 20.

35 See UK patent at col. 1, line 127 through col. 2, line 1.

36 See Final Office Action at page 6, lines 17-18.

suggests all of the limitations of claim 18. Further, the Office has not shown that any of the cited art teaches or suggests the desirability of modifying the UK patent so as to hide the existence and/or location of the microfilm. As such, the Office has not established a prima facie case of obviousness for claim 18, and the rejection of claim 18 under 35 U.S.C. 103(a) should be reversed.

### Claim 19

Claim 19, as amended in the accompanying amendment to depend from claim 1, now reads:

19. *The identification document of claim 1 wherein said first and second printed matter comprise identifying information that is determined most likely to be altered.*

Regarding claim 19, the Office has failed to establish that the cited art teaches all of the elements of these claims. In particular for claim 19 the Office has failed to show how the combination of references discloses that the “*first and second printed matter comprise identifying information that is determined most likely to be altered.*” The Office has not shown or provided any details as to how any of the cited art, taken alone or in combination, teaches the elements of claim 19. Rather, the Office has instead stated that it would have been obvious to one of ordinary skill in the art to place any desired indicia for the first and second printed matter, since the indicia would only depend on the intended use of the identification documents, and the Office further stated that the claimed printed matter (of claim 19) is not functionally related to the substrate.<sup>37</sup>

In contrast to the Examiner’s assertions, the second printed matter of claim 19 is functionally related to the substrate (identification document). By selecting the first and second printed matter to be identifying information that is determined to be most likely to be altered, the first and second printed matter of claim 19 have a functional relationship such that they help

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<sup>37</sup> See Final Office Action at page 6, lines 7-12.

make duplication of the identification document difficult and help to make detections of alterations or counterfeiting of the identification document easier to detect, such as by allowing the first printed matter to be compared to the more difficult to alter second printed matter.<sup>38</sup>

Claim 19 stands rejected based on the UK patent in view of the Dow patent and the Richardson patent. The UK patent is entirely silent as to whether both the information printed or embossed on the card itself and the microfilm actually comprises information that is most likely to be altered. Rather, the UK patent states that the microfilm or microprint information is intended to be read, using a reader, and compared with a duplicate microfilm or the like held by the bank, for direct comparison with the microfilm on the card.<sup>39</sup> The Dow and Richardson references are likewise silent as to any teaching or suggestion as to providing first and second printed matter that each comprise information that is most likely to be altered.

The Office states, in connection with claim 19, that if the prior art structure is capable of performing the intended use, it meets the claim<sup>40</sup> The problem is, when all of the limitations of the parent claim are read into claim 19 (see the recitation of claim 1, above), there is no “prior art structure” to perform anything. The Office has not shown that any of the cited art teaches or suggests all of the limitations of claim 19. As such, the Office has not established a prima facie case of obviousness for claim 19, and the rejection of claim 19 under 35 U.S.C. 103(a) should be reversed.

### Claim 21

Claim 21 recites

21 *A method of printing a document containing identifying information for a particular person comprising:*  
*providing a base card;*

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38 See Specification at page 2, lines 1-20, page 3, lines 1-23, and page 6, lines 9-19.

39 See UK patent at col. 2, lines 1-39.

40 See Final Office Action at page 6, lines 17-18.



*printing first information which is specific to the particular person identified on said base card at a first location and at a first scale enabling said printed information to be perceived without magnification; and*

*printing second information at a second micro scale and at a predetermined secret second location on said document, and in a second color, said second information comprising information capable of communicating the same identifying information as said first information, said second micro scale being significantly smaller than said first scale, said second location being spaced from said first location, and said second color being selected to effect minimal contrast between said second information in said second location and its immediate background, the combination of said predetermined secret second location, minimal contrast and said second microscale substantially hiding said second information from the naked eye and preventing said second information from being clearly perceived unless said the second information is viewed using a magnifying lens by a party with knowledge of the predetermined secret second location.*

Claim 21, like claim 1, stands rejected under 35 U.S.C. 103(a) over the UK patent in view of Dow and Richardson.

As noted previously in connection with claim 1, the UK patent teaches that its microfilm or microprint information (a) cannot be ascertained by the naked eye (even with the aid of a magnifying lens); (b) should be placed on a clear or light colored area so that the microfilm it can be viewed using a microfilm reader; and (c) is kept confidential from the naked eye by being provided in microfilm that cannot be ascertained by the naked eye even with the aid of a magnification lens. Items (a) and (c) above are directly opposite to the recitation of claim 21, which claim states that the second information can be clearly perceived using a magnifying lens. As explained more fully in connection with claim 1, modifying the UK patent with Richardson to make the UK patent's microfilm or microprint information ascertainable by a magnifying lens expressly changes the principle of operation of the UK patent. As MPEP 2143.01 states, if a proposed modification or combination of the prior art would change the principle of operation of

the prior art invention being modified, then the teachings are not sufficient to render the claims *prima facie* obvious.

The cited combination of references also cannot satisfy claim 21's recitation that the second information is printed in a second color "selected to effect minimal contrast between said second information in said second location and its immediate background". The Examiner asserts that Dow teaches the minimal contrast of claim 21, but, as Applicants explained in connection with claim 1, combining Dow with the UK patent fails in several respects.

First, Dow does not teach minimal contrast but instead teaches the use of colors that appear the same unless viewed using specialized equipment. This was explained more fully in connection with the argument of claim 1.

Second, there is no suggestion or modification in any of the art of record to modify the microfilm of the UK patent by printing it so as to have "minimal contrast" with its background (for purposes of hiding it). No teaching or suggestion is necessary because the UK patent already states that because the microfilm or microprint information cannot be ascertained by the naked eye, even with the aid of a magnification lens, the microfilm or microprint information remains confidential. This also was explained more fully in connection with claim 1.

Third, modifying the microfilm of the UK patent as suggested would render the UK patent unsatisfactory for its intended purpose. As item (b) above explains, the UK patent teaches that a purpose of using its microfilm is to enable the microfilm to be read using a microfilm reader. Providing the microfilm on a "minimal contrast" background (instead of the clear or light colored background recited in the UK patent) would make reading the microfilm extremely difficult or even impossible. Even if the UK patent were modified by Dow, there would be no reasonable expectation of success, because any "minimal contrast" modification to the UK patent would likely render it technically impossible to view the microfilm or microprint of the UK patent.

For at least the above reasons, the Examiner has failed to set forth a *prima facie* case of obviousness under § 103 and the rejection of claim 21 should be reversed.

**Claim 23**

Claim 23 depends from claim 21 and recites:

23. *The method of Claim 21 wherein said step of printing said second information at said predetermined secret second location consists of printing said second information in a single color, said color being selected to effect minimal contrast between said second information - in said second location and its immediate background.*

Regarding claims 23-26, the Office has failed to establish that the cited art teaches all of the elements of these claims.

In particular for claim 23, the Office has failed to show how the combination of references discloses a method of printing wherein the method includes the step of printing “*said second printed information in a single color, said color being selected to effect minimal contrast between said second information - in said second location and its immediate background.*” The Office has not shown or provided any details as to how any of the cited art, taken alone or in combination, teaches the elements of claim 23. Claim 23 stands rejected based on the UK patent in view of the Dow patent and the Richardson patent, yet, as described above in connection with claims 1 and 21, none of these references teach or suggest any type “minimal contrast” between the second printed matter and its immediate background, nor do they teach or suggest as selecting a single color to effect such minimal contrast. The combined teachings, therefore, fail to teach all of the elements of claim 23. As such, the Office has not established a prima facie case of obviousness for claim 23, and the rejection of claim 23 under 35 U.S.C. 103(a) should be reversed.

**Claim 24**

Claim 24 depends from claim 21 and recites:

24. *The method of claim 21 wherein said step of printing said second information at said second predetermined secret location consists of printing said second information in a relatively dark toned color on a lighter toned background, said light tone and said darker tone constituting a tone difference, said tone difference being selected to effect minimal contrast between said second information in said second predetermined secret location and its immediate background.*

Regarding claim 23-26, the Office has failed to establish that the cited art teaches all of the elements of these claims. In particular for claim 24, the Office has failed to show how the combination of references discloses a method of printing wherein the method includes the step of printing “*second information in a relatively dark toned color on a lighter toned background, said light tone and said darker tone constituting a tone difference, said tone difference being selected to effect minimal contrast between said second information in said second predetermined secret location and its immediate background*” The Office has not shown or provided any details as to how any of the cited art, taken alone or in combination, teaches the elements of claim 24. Claim 24 stands rejected based on the UK patent in view of the Dow patent and the Richardson patent, yet, as described above in connection with claims 1 and 21, none of these references teach or suggest any type of “tone difference”. The combined teachings, therefore, fail to teach all of the elements of claim 24. As such, the Office has not established a prima facie case of obviousness for claim 24, and the rejection of claim 24 under 35 U.S.C. 103(a) should be reversed.

### **Claim 25**

Claim 25 depends from claim 21 and recites:

25. *The method of claim 21 wherein said step of printing said second information at said second predetermined secret location consists of printing said second information in a relatively light toned color on a darker toned background, said light tone and said darker tone constituting a tone difference, said tone difference being selected to effect minimal contrast*

*between said second information in said second predetermined secret location and its immediate background.*

Regarding claims 23-26, the Office has failed to establish that the cited art teaches all of the elements of these claims. In particular for claim 25, the Office has failed to show how the combination of references discloses a method of printing wherein the method includes the step of printing “*said second information in a relatively light toned color on a darker toned background, said light tone and said darker tone constituting a tone difference, said tone difference being selected to effect minimal contrast between said second information in said second predetermined secret location and its immediate background*” The Office has not shown or provided any details as to how any of the cited art, taken alone or in combination, teaches the elements of claim 25. Claim 25 stands rejected based on the UK patent in view of the Dow patent and the Richardson patent, yet, as described above in connection with claims 1 and 21, none of these references teach or suggest any type of “tone difference”. The combined teachings, therefore, fail to teach all of the elements of claim 25. As such, the Office has not established a prima facie case of obviousness for claim 25, and the rejection of claim 5 under 35 U.S.C. 103(a) should be reversed.

#### **Claim 26**

Claim 26, which depends from claim 21, recites

26. *The method of claim 21 wherein said step of printing said second information at said second predetermined secret location comprises graphically reproducing said first information.*

Claim 26 stands or falls with claim 21 and is patentable for the same reasons as claim 21.

### CONCLUSION

For the foregoing reasons, the final rejection of claims 1, 3-6, 8-10, 13, 18, 19, 21, and 23-26 should be reversed.

Date: May 3, 2004

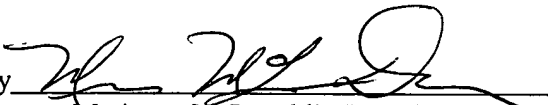
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**APPENDIX**

## Pending Claims (as amended in the accompanying amendment)

## 1. An identification document comprising:

first printed matter rendered at a first location on said document and at a first scale enabling said first printed matter to be resolved by a viewing person without magnification, said first printed matter conveying identifying information;

second printed matter comprising information that communicates the same identifying information as said first printed matter, the second printed matter rendered at a second microscale and at a second confidential location on said document and in a second color, said second microscale being significantly smaller than said first scale, said second confidential location being spaced from said first location and being selected and arranged to be a location that is not generally known, and said second color being selected to effect minimal contrast between said second printed matter in said second location and its immediate background;

wherein the combination of said minimal contrast, said second confidential location, and said second microscale is constructed and arranged to substantially hide the existence and location of said second printed matter from the naked eye and prevent said second printed matter from being substantially detected or resolved unless a viewing party knows the second confidential location and views said second printed matter using a magnification lens.

## 2. Cancelled

3. The identification document of Claim 1 wherein said second printed matter consists of text rendered in a single color, said color being selected to effect minimal contrast between said second printed matter in said second confidential location and its immediate background.

4. The identification document of Claim 1 wherein said second printed matter consists of

relatively dark toned text printed on a background color which is lighter toned than said text, said light tone and said darker tone constituting a tone difference, said tone difference being selected to effect minimal contrast between said second printed matter in said second confidential location and its immediate background.

5. The identification document of Claim 1 wherein said second printed matter consists of relatively light toned text printed on a background color which is darker toned than said text, said light tone and said darker tone constituting a tone difference, said tone difference being selected to effect minimal contrast between said second printed matter in said second confidential location and its immediate background.

6. The identification document of claim 1 wherein said identification document identifies a particular person and said identifying information comprises at least one of information specific to the identified person and information specific to the identification card.

7. Cancelled

8. The identification document of claim 1 wherein said first and second printed matter comprise alphanumeric characters.

9. The identification document of claim 1 wherein said first and second printed matter comprises at least two digits of the year of birth of a person identified in the document.

10. The identification document of claim 1 wherein said second printed matter is a graphical reproduction of said first printed matter.

11. Cancelled.



12. Cancelled.

13. The identification document of Claim 1 wherein said construction and arrangement to substantially hide said second printed matter further comprises printing said second printed matter within a graphical image having sufficient complexity to camouflage said second printed matter from the naked eye.

14. Cancelled.

15. Cancelled

16. Cancelled.

17. Cancelled

18. The identification document of claim 1 wherein said second printed matter communicates said first printed matter in an encrypted form.

19. The identification document of claim 1 wherein said first and second printed matter comprise identifying information that is determined most likely to be altered.

20. Cancelled.

21. A method of printing a document containing identifying information for a particular person comprising:

providing a base card;

printing first information which is specific to the particular person identified on said base card at a first location and at a first scale enabling said printed information to be perceived

without magnification; and

printing second information at a second micro scale and at a predetermined secret second location on said document, and in a second color, said second information comprising information capable of communicating the same identifying information as said first information, said second micro scale being significantly smaller than said first scale, said second location being spaced from said first location, and said second color being selected to effect minimal contrast between said second information in said second location and its immediate background, the combination of said predetermined secret second location, minimal contrast and said second microscale substantially hiding said second information from the naked eye and preventing said second information from being clearly perceived unless said the second information is viewed using a magnifying lens by a party with knowledge of the predetermined secret second location.

22. Cancelled

23. The method of Claim 21 wherein said step of printing said second information at said predetermined secret second location consists of printing said second information in a single color, said color being selected to effect minimal contrast between said second information - in said second location and its immediate background.

24. The method of claim 21 wherein said step of printing said second information at said second predetermined secret location consists of printing said second information in a relatively dark toned color on a lighter toned background, said light tone and said darker tone constituting a tone difference, said tone difference being selected to effect minimal contrast between said second information in said second predetermined secret location and its immediate background.

25. The method of claim 21 wherein said step of printing said second information at said second predetermined secret location consists of printing said second information in a relatively light toned color on a darker toned background, said light tone and said darker tone constituting a

tone difference, said tone difference being selected to effect minimal contrast between said second information in said second predetermined secret location and its immediate background.

26. The method of claim 21 wherein said step of printing said second information at said second predetermined secret location comprises graphically reproducing said first information.